

NECHAYEV, G.K., kand.tekhn.nauk; VASIL'YEV, Yu.K., kand.tekhn.nauk;
BOGAYENKO, I.N., inzh.; BEREZYUK, B.S., inzh.; SHERMAREVICH,
M.G., inzh.

Devices for temperature control in large d.c. machines.
Vest. elektroprom. 33 no.11:31-34 N '62. (MIRA 15:11)
(Electric motors, Direct current)

VASIL'YEV, YU.K., PROKOF'YEV, YU.A.

"Step motors with active rotors."

Report submitted to the Second Intl. Congress of the Intl. Federation
of Automatic Control, Basel, Switzerland 27 Aug- 4 Sep 1963

VASIL'YEV, YU. K.

32514, Pal'tsev, A. G. Pis'mo y redaktsiyu. (Po povodu stat'i V. V. Tashchina
"Povysit' uroven' tekhnicheskogo proyektirovaniya torfyanykh predpriyatiy" v zhurn.
"Torf. prom-st". 1949, No. 6). Torf. prom-st', 1949, No. 10, s. 31-32.

SO: Letopis' Zhurnal'nykh Statey, Vol. 44

1. PAL'TSEV, A. G.: VASIL'EV, Yu. K.
2. USSR (600)
4. Peat Industry
7. Twenty years' activity of the State Planning Institute "State Institute for the Planning of Peat Industry Plants." Torf. prom., 29 no. 12, 1952.

9. Monthly List of Russian Accessions, Library of Congress, March 1953.
Unclassified.

VASIL'YEV, Yu.K.

[Preparation of peat fields for extraction] Podgotovka torfianyykh mestorozhdenii k ekspluatatsii. Moskva, Gos.energ.izd-vo, 1953. 55 p.

(MIRA 6:7)

(Peat industry)

ANTONOV, V.Ya., kand.tekhn.nauk; BEZZUBOV, N.D., kand.tekhn.nauk; BELOKO-
PYTOV, I.Ye., kand.sel'skokhoz.nauk; BLYUMENBERG, V.V., kand.tekhn.
nauk; BOGDANOV, N.N., kand.tekhn.nauk; BRAGIN, N.A., inzh.; VASIL'YEV,
Yu.K., inzh.; VINOGRADOV, V.A., inzh.; ROZENBERG, B.I., inzh.; GOR-
GIDZHANYAN, S.A., kand.tekhn.nauk; ZIZA, A.A., kand.sel'skokhoz.nauk;
KALABUKHOV, M.V., agronom-meliorator; KOLOTUSHKIN, V.I., inzh.; KORCHU-
NOV, S.S., kand.tekhn.nauk; KRYUKOV, M.N., dotsent; VAVULO, V.A., inzh.;
NAUMOV, D.K., kand.tekhn.nauk; OLENIN, A.S., inzh.; PROVORKIN, A.S.,
inzh.; PROKHOROV, N.I., dotsent; RASKIN, G.I., inzh.; SAVENKO, I.V.,
inzh.; SERGEYEV, B.F., kand.tekhn.nauk; STOYLIK, M.A., inzh.; SUKHA-
NOV, M.A., inzh.; TOPOL'NITSKIY, N.M., kand.tekhn.nauk; TYUREBNOV, S.N.,
doktor biol.nauk, prof.; PACHIKHINA, O.Ye., kand.sel'skokhoz.nauk;
TSVETKOV, B.I., inzh.; CHUBAROV, N.D., inzh.; MANDEL'BAUM, A.I., inzh.;

(Continued on next card)

ANTONOV, V.Ya.---(continued) Card 2.

YARTSEV, A.K.; SAMSONOV, N.N., inzh., glavnyy red.; BERSHADSKIY, L.S., inzh., nauchnyy red.; VARENTSOV, V.S., kand.tekhn.nauk, nauchnyy red.; VISOTSKIY, K.P., kand.tekhn.nauk, nauchnyy red.; GORINSHTEYN, L.L., kand.tekhn.nauk, nauchnyy red.; GORYACHKIN, V.G., prof., nauchnyy red.; YEFIMOV, P.N., kand.tekhn.nauk, nauchnyy red.; KUZEMAN, G.I., kand.tekhn.nauk, nauchnyy red.; KULAKOV, N.N., kand.tekhn.nauk, nauchnyy red.; KUTAIS, L.I., prof., doktor tekhn.nauk, nauchnyy red.; MIRKIN, M.A., inzh., nauchnyy red.; SEMENSKIY, Ye.P., kand.tekhn.nauk, nauchnyy red.; SOKOLOV, A.A., kand.tekhn.nauk, nauchnyy red.; KHAZANOV, Ya.N., dotsent, nauchnyy red.; KHALUGO, A.K., inzh., nauchnyy red.; TSUPROV, S.A., dotsent, nauchnyy red.; SHTEYNBOK, G.D., inzh., nauchnyy red.; KOLOTUSHKIN, V.I., red.; SKVORTSOV, I.M., tekhn.red.

[Reference book on peat] Spravochnik po torfu. Moskva, Gos.energ. izd-vo, 1954. 728 p. (MIRA 13:7)

1. Chlen-korrespondent AN BSSR (for Goryachkin).
(Peat--Handbooks, manuals, etc.)

HAUSIN, A.F.; SOKOLOV, A.A.; ANTONOV, V.Ya.; KURDYUMOV, S.V.; BEL'KEVICH, P.I.; SAVINYKH, A.J.; KARAKIN, F.F.; SOLOPOV, S.G.; YEFIMOV, V.S.; YARIVITSIN, V.I.; RABKIN, B.A.; BABARIN, A.F.; MATVEYEV, L.M.; FUNIKOV, S.A.; CHERNENKOV, D.P.; BULAYEVSKIY, N.V.; kandidat tekhnicheskikh nauk; SHINKARINK, K.K.; TSUPROV, S.A.; GINZHURG, L.N.; VASIL'YEV, Yu.K.

Scientific and technical conference on the work of the pest industry of the Ministry of Electric Power Stations. Torf.prom. 32 no.2:1-20 '55. (MLRA 8:5)

1. Zamestitel' ministra elektrostantsiy (for Bausin). 2. Zamestitel' direktora VNIITP (for Sokolov). 3. Zamestitel' direktora MTI (for Antonov). 4. Zamestitel' direktor "Krnimesttopprom" (for Kurdyumov). 5. Direktor Instituta torfa AN BSSR (for Bel'kevich). 6. Nachal'mik Glavenergozapchasti MES (for Savinykh). 7. Glavnyy inzhener Ivanovskogo torfotresta (for Karakin). 8. Zamestitel' direktora MTI (for Solopov). 9. Upravlyayushchiy Shaturskogo torfotresta (for Yefimov). 10. Glavnyy mekhanik Invanosvskogo torfotresta (for Yarovitsin). 11. Glavnyy mekhanik Leningradskogo torfotresta (for Rabkin). 12. Glavnyy inzhener Ozeretsko-Neplyuyevskogo torfopredpriyatiya (for Babarin). 13. Glavnyy inzhener Ger'kovskogo torfotresta (for Matveyev). 14. Ru-kovoditel' laboratorii VNIITP (for Funikov). 15. Glavnyy inzhener tresta Lentorfostroy (for Chernenkev).

(Continued on next card)

VASIL'YEV, Yu.K.

Winning and utilization of peat in Scotland. Torf.prom.33 no.3:
32-33 '56. (MIRA 9:7)

1.Giprotorf.
(Scotland--Peat)

VASIL'YEV, Yu. K. inzh., red.; PEVZNER, A.S., red.izd-va; GUSEVA, S.S.,
tekhn.red.

[Reference book on consolidated cost indices for planning and
research] Spravochnik ukрупnennykh pokazatelei stoimosti pro-
ektnykh i izyskatel'skikh rabot. Vvoditsia v deistvie s 1 ianvaria
1958 g. Moskva, Gos.izd-vo lit-ry po stroit. i arkhitekt. Pt.11.
[Enterprises of peat industry] Predpriiatiia torfianoi pro-
myshlennosti. 1957. 8 p. (MIRA 12:8)

1. Russia (1923- U.S.S.R.). Gosudarstvennyy komitet po delam
stroitel'stva.

(Peat industry--Costs)

VASIL'YEV, Yu.K., inzh.

Develop the winning of peat in the Ural Mountains and in Western
Siberia. Torf. prom. 35 no.5:21-22 '58. (MIRA 11:10)

1. Gosudarstvennyy institut po proyektirovaniyu zavodov torfyanoy
promyshlennosti.

(Ural Mountain region--Peat)
(Siberia, Western--Peat)

VASIL'YEV, Yu.K., kand.tekhn.nauk; BOGAYENKO, I.N., inzh.

Study of thermal conditions in the operation of heavy rolling mills.
Vest.elektroprom. 33 no.12:32-35 D '62. (MIRA 15:12)
(Rolling mills)

VASIL'YEV, Yu.K.

New design of supports for band conveyers. Mashinostroitel' no.12:
17 D '60. (MIRA 13:12)

(Conveying machinery)

"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001858920016-1

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001858920016-1"

110-3-7/22

110-3-7/22

AUTHOR: Vasil'yev, Yu.K., Candidate of Technical Sciences

TITLE: Thermal Tests on High-power Alternating Current Motors under Operating Conditions (Teplovyye ispytaniya moshchnykh elektrodvigatelye peremennogo toka v usloviyakh ekspluatatsii)

PERIODICAL: Vestnik Mashinostroyeniya, 1958, Vol.29, No.3, pp. 36 - 39 (USSR).

ABSTRACT: The article describes work carried out by staff of the Kiyev Polytechnical Institute (Kiyevskiy politekhnicheskii institut), of the Central Asian Polytechnical Institute (Sredne-Aziatskiy politekhnicheskii institut) and of factories under the leadership of Prof. I.M. Postnikov. Electrical, thermal, ventilating and a number of special tests were made on dozens of motors; the article describes some thermal tests and calculations.

The object of the thermal tests was: to establish whether the motors conformed to the standards for temperature rise; to reveal power reserves in respect of temperature rise; to establish the highest permissible stator and rotor currents depending on the ambient temperature; to determine the heating time constants of different parts of the machine; to determine the temperature distribution in the stator; to

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11C-3-7/22

The effect of changing the field current of synchronous motors; and to check various methods of testing thermal calculations. In making the tests under operating conditions, it was not possible to vary the load factor. A number of other tests were used to determine stator winding temperatures, including resistance and thermocouple methods. The location of a considerable number of thermocouples in one type of machine is shown in Fig. 1. It was possible to make two and sometimes three testing tests on machines at different loads and a formula is given that was used to calculate the temperature rise at other loads.

The temperature rises, referred to rated operating conditions, are tabulated. It is shown that in a number of machines, the temperature rise exceeds that permitted by the standard and in others it is less. Interesting variations were found when measuring temperatures at different places along the length of the machines. Time constant for heating and cooling different parts of the machines, shown in Fig. 2, were determined by an oscillographic method. The time constant time-constant for stator copper heating was 25 - 35 min., for

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Thermal Tests on High-power Alternating Current Motors under Operating Conditions

stator steel 30 - 45 min. and for air ducts 30 - 60 min. In synchronous motor excitation tests, it was found that when the field current was increased by a factor of from 2 - 3.5 (so that the rotor losses were increased by 4 to 15 times), the increase in the copper, steel and air temperature of the stator was 3 - 8 °C. Similar results were obtained in tests made on hydro-alternators under the guidance of Academician N.S. Kuznetsov.

Comparison between test data and calculations showed that the Elektrosila Works method of calculating temperature gives good results when determining steel temperatures. Copper temperatures determined by this method are in good agreement with test data for high-speed machines, but for slow-speed machines the method gives values that are too low by as much as 20 °C. Moreover, the Elektrosila method determines only the average temperature, whereas the maximum temperature is of interest. The work showed that the factories have paid insufficient attention to the heating and ventilation characteristics of high-power electric motors. It would be advisable to install thermocouples in the slots of large rotors. The manufacturers

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Thermal Tests on High-power Alternating Current Motors under Operating Conditions

should indicate the permissible current at various ambient temperatures. The difference between the mean and maximum temperatures can be 10 °C or more. It was often found that hot air leaving the machine re-entered it; machines should be designed in such a way that this cannot occur. In some cases, inadequate provision is made for cooling the end windings. Many motors get very dirty in service and should be made with a closed ventilation system. There are 2 figures, 1 table.

ASSOCIATION: **Kiyev** Polytechnical Institute (Kiyevskiy politekhnicheskii institut)

AVAILABLE: Library of Congress

Card 4/4

1. Electric motors-Test methods
2. Electric motors-Test results
3. Electric motors-Thermal effects

VASIL'YEV, Yu.K., kand. tekhn. nauk; KARPENKO, B.K., kand. tekhn. nauk;
KRAVTSOV, O.K., inzh.; MURASHKO, V.A., inzh.; IVANOVA, I.G., inzh.

Direct current motor with printed armature winding.
Energ. i elektrotekh. prom. no.1:25-28 Ja-Mr'64.

(MIRA 17:5)

VASIL'YEV, Yu.K., kand.tekhn.nauk; BOGAYENKO, I.N., inzh.

Operational tests of the cooling of large d.p. rolling mills.
Elektrotekhnika 35 no.3:5-9 Mr '64. (MIRA 17.6)

L 10228-66 EWT(1)

ACC NR: AP0002408

SOURCE CODE: UR/0105/64/000/010/0020/0023

AUTHOR: Vasil'yev, Yu. K. (Candidate of technical sciences; Kiev)

ORG: none

TITLE: Thermal calculation of geared stopping motors

SOURCE: Elektrichestvo, no. 10, 1964, 20-23

TOPIC TAGS: electric motor, electric engineering

ABSTRACT: The motor analyzed in this paper is an encased four-phase motor, which contains a reactive toothed rotor and a stator having eight slots and eight toothed pole-pieces. Each slot has a two-layer lumped control winding. When the motor is running, two phases are always energized. Two sections of each phase are located in opposite slots. A cross-section of the motor is shown in the figure, in which the bold lines indicate the windings energized at a given instant. The motor heats up nonuniformly when the motor is stopped and the same set of phase windings are drawing current. With respect to heating, this is the least favorable mode of operation, and must be considered in designing such motors. The fundamental assumptions made for encased motors are the usual ones with regard to heat dissipation, temperature distribution, and heat transfer. Equivalent circuits are shown for the motor and are used to compute temperatures. To simplify computations the equivalent circuits is divided

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UDC: 621.313.13--133.4

L 10228-66

ACC NR: AP6002408

into like parts in which thermal process are identical. Nonstationary temperatures are computed by treating the motor as a two-part system: the casing and mechanical parts as a heat sink and the rest of the motor as a heat source. A detailed numerical example of calculations is given and it is shown that these results compare well with the theory. Orig. art. has: 6 figures, 17 formulas. [JPRS]

SUB CODE: 09 / SUBM DATE: 09May64 / ORIG REF: 005

Cord

VASIL'YEV, Yu.K., kand.tekhn.nauk; PROKOF'YEV, Yu.A.,kand.tekhn.nauk;
RYEAL'CHENKO, Yu.I., inzh.; LARCHENKO, V.I., inzh.

Stepping reducer motors and semigraphical method for their
design. Elektrotehnika 36 no.12:11-16 D '65.

(MIRA 19:1)

VASIL'YEV, Yu.K., kand. tekhn. nauk, dotsent (Kiyev)

Precise thermal design of a single-row excitation winding. Elektri-
chestvo no.6:39-45 Je '65. (MIRA 18:7)

VASIL'YEV, Yu.K., kand. tekhn. nauk (Kiyev)

Thermal design of reducer-type stepping motors. Elektrichestvo
no.10:20-23 0 '64. (MIRA 17:12)

VASIL'YEV, Yu.K., kand. tekhn. nauk (Kiyev); BOGAYENKO, I.N., inzh.
(Kiyev)

Experimental study of the heating and ventilation of the
traction motors of main-line electric locomotives. Elektri-
chestvo no.2:32-37 F '64. (MIRA 17:3)

VASIL'YEV, Yu.K., kand.tekhn.nauk; PROKOF'YEV, Yu.A., kand.tekhn.nauk;
VAYNBERGER, G.Ya., inzh.

Stepping motors with active rotors. Elektrichestvo no.2:50-56
F '63. (MIRA 16:5)

1. Institut avtomatiki Gosplana UkrSSR.
(Electric motors, Synchronous)

VASIL'YEV, Yu.K., inzh.

Wooden rollers for belt conveyers. Stroiki dor.mashinostr. 5
no.7:25-27 J1 60. (MIRA 13:7)
(Conveying machinery)

YASIN, Y.B.

Comparison of the complexity of the two L.N.T.'s and Ministry of Education.
Dokl. Akad. Nauk SSSR. 1:13-14 (1971). (MIL-1)

1. Relationship to the university curriculum in the U.S.S.R.
Preston, R. H. (1971). (MIL-1)
(logic, symbolic and mathematical)

S/582/62/000/008/013/013
D405/D301

AUTHOR: Vasil'yev, Yu. L. (Novosibirsk)

TITLE: Close packed non-group codes

SOURCE: Problemy kibernetiki. no. 8, Moscow, 1962, 337-339

TEXT: A method for construction of close-packed $(n,3)$ -codes is proposed. Unlike similar methods (considered in the references) it yields not only group codes, but also strongly non-group codes (a strongly non-group code is a code which is neither a group code nor a group-code shift). This means that the question whether strongly non-group codes exist is answered in the affirmative. A lower estimate is given of the ratio of the number of types of strongly non-group $(n,3)$ -codes to the number of all $(n,3)$ -codes. This estimate is expressed by the number

$$2^{2n(\frac{1}{2} - \delta)}.$$

Card 1/2

Close packed non-group codes

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D405/D301

The strongly non-group code is constructed with the help of a theorem. Several other estimates are derived. Since each $(2p + 1, 3)$ -group code is completely determined by its generating functions, whose number does not exceed $2p$, it follows that the number of

$(2p + 1, 3)$ group codes does not exceed $C_2^{2p} 2p + 1 \cdot 2^{5p^2}$.

SUBMITTED: November 13, 1961

Card 2/2

16.7000 (2903)

32823

S/020/62/142/002/001/029
C111/C222

AUTHOR: Vasil'yev, Yu. L.

TITLE: Irreducible disjunctive normal forms for certain classes of truth functions

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 142, no. 2, 1962, 263-265

TEXT: The author examines the relationship between the complexity of an arbitrary irreducible disjunctive normal form (d.n.f.) (Ref. 1: S. V. Yablonskiy, Tr. Matem. inst. im. V. A. Steklova AN SSSR, 51, 5 (1958)) and the minimal d.n.f. of the function f , taking into consideration $\dim f$ ($\dim f \equiv$ the maximal dimensions of such subcubes of the unit-cube, for which $f(x_1, \dots, x_n) = 1$). ✓

To estimate to what extent the complexity of an irreducible d.n.f. is larger than the complexity of the minimal d.n.f. $Y(f) = \max [I(T_1)/I(T_2)]$ is introduced, where the maximum extends over all pairs of irreducible d.n.f. T_1, T_2 of the function f ; $I(T_1), I(T_2)$ denote the number of conjunctives in these d.n.f.'s. One has $Y(f) \leq 2^{\dim f}$

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S/020/62/142/002/001/029

C111/C222

Irreducible disjunctive normal . . .

and $Y(f) \sim 2^{\dim f}$ only for functions with $\dim f = 0$.

The author examines to what extent the estimate $Y(f) \leq 2^{\dim f}$ is sharp. Let $D(n)$ be an integral function, $0 \leq D(n) \leq n$; let $\mathcal{M}_{D(n)}$ denote the class of functions $f(x_1, \dots, x_n)$ for which $\dim f \leq D(n)$;

$$Y(\mathcal{M}_{D(n)}) = \max_{f \in \mathcal{M}_{D(n)}} Y(f).$$

Theorem: For each integral function $\mathcal{D}(n)$, $0 \leq \mathcal{D}(n) \leq n$, a function $D(n)$ and a class $\mathcal{M}_{D(n)}$ can be given, so that $D(n) \sim \mathcal{D}(n)$ and

$Y(\mathcal{M}_{D(n)}) \sim 2^{D(n)}$. In the proof, the author considers first "superpositions" of irreducible d.n.f., then powers of so called support-functions and, on this basis, constructs functions $f_n(x_1, \dots, x_n)$, for which $Y(f_n) \rightarrow 2^{\dim f_n}$ where $n \rightarrow \infty$, and $\dim f_n$ increases with n , for instance, $\dim f_n > n - [n/k]$, where $k \geq 2$ and is independent of n .

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32823

S/020/62/142/002/001/029
C111/C222

Irreducible disjunctive normal . . .

There are 3 Soviet-bloc references.

ASSOCIATION: Institut matematiki s vychislitel'nyy tsentrom Sibirskogo
otdeleniya Akademii nauk SSSR (Institute of Mathematics
with Computing Center of the Siberian Department of
the Academy of Sciences USSR)

PRESENTED: August 12, 1961, by S. L. Sobolev, Academician

SUBMITTED: August 10, 1961

Card 3/3

VASIL'YEV, Yu.L. (Novosibirsk)

Ungrouped tightly packed codes. Probl.kib. no.8:337-340 '62.
(MIRA 16:4)

(Information theory)

VASIL'YEV, Yu. L.

Dissertation defended for the degree of Candidate of Physicomathematical Sciences
at the Joint Scientific Council on Physicomathematical and Technical Sciences;
Siberian Branch

"Comparison of the Complexity of Minimal and cul-de-Sac Disjunctive Normal Form."

Vestnik Akad. Nauk, No. 4, 1963, pp 119-145

VASIL'YEV, Yu.L.

Length of a cycle in an n -dimensional unit cube. Dokl. AN SSSR
148 no.4:753-756 F '63. (MIRA 16:4)

1. Institut matematiki Sibirskogo otdeleniya AN SSSR.
Predstavleno akademikom S.L.Sobolevym. Dokl. AN SSSR 148 no.4:
753-756 F '63. (MIRA 16:4)

1. Institut matematiki Sibirskogo otdeleniya AN SSSR.
Predstavleno akademikom S.L.Sobolevym.
(Cybernetics)

ACCESSION NR: AT4016486

B/2582/63/000/010/0005/0061

AUTHOR: Vasil'yev, Yu. L. (Novosibirsk)

TITLE: A comparison of the complexity of blind and minimal disjunctive normal forms

SOURCE: Problemy* kibernetiki, no. 10, 1963, 5-61

TOPIC TAGS: cybernetics, automation, control system, automatic control, disjunctive normal form, circuit design, localness, equivalence, monotonicity, error correction

ABSTRACT: The author first defines what is meant by the complexity of the disjunctive normal form (d.n.f.). The concept of "almost minimal" d.n.f. is then discussed, along with the algorithmic difficulties encountered in the synthesis of minimal circuits (the d.n.f. is considered as a control system circuit, whose operation is described by the corresponding function of the algebra of logic). It is pointed out that in the d.n.f. theory many synthesis algorithms are known, all of which give d.n.f. which might be considered "sufficiently simple", the essential point being that this "sufficiency" of simplicity is not of a metric (digital) nature, but of a descriptive nature, connected with a certain natural, partial ordered state of the d.n.f. The present paper seeks to derive some estimates in response

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to the question: what is the difference between the complexity of "sufficiently simple" and minimal d.n.f.? For a clearer exposition of the problem, the author reviews the basic information with respect to d.n.f., drawing heavily on the work of S. V. Yablonskiy. The terms "localness", "equivalence" and "monotonicity" are discussed and defined. A d.n.f. T is called "blind" (a term introduced by Yablonskiy) if the cancellation of any disjunctive term or any factor in any disjunctive term transforms T into d.n.f. T^* , non-equivalent to T . A minimal d.n.f. is blind, but a blind d.n.f. may or may not be minimal. In practice, as a "sufficiently simple" d.n.f., one takes an arbitrary blind d.n.f. for a given function f . It is pointed out that the construction of any one blind d.n.f. for a given function f is a relatively uncomplex matter. The author uses the term "spread" for an arbitrary function f and the nomenclature $R(f)$ for the ratio of the complexity of the maximal d.n.f. of function f to the complexity of its minimal d.n.f. (for any function f , the multiplicity of all its blind d.n.f. is finite; the blind d.n.f. having the greatest complexity is called the maximal d.n.f. of function f). The purpose of this work is to obtain estimates for $R(n) = \max R(f)$, where the maximum is taken for all f of n variables, as well as estimates of $R(f)$ for individual functions f . Thus, the paper seeks to investigate

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the difficulties encountered at different individual stages in the synthesis of minimal d.n.f. and to give metric (digital) estimates. The methods developed in this article have been found to be applicable to certain other problems as well, relating to the construction of functions, in which one or another of the metric properties are extremal and which, at first glance, have little in common with the comparison of the complexity of blind and minimal d.n.f. In this way, on the one hand, certain new facts and estimations have been derived in the theory of error-correcting codes and, on the other, there has been constructed in an n -dimensional unit cube a cycle in which the length equals $\frac{2^n}{n}$ for $n = 2^m$,

$m = 3, 4, \dots$, and not less than $(1 - \epsilon_n) \frac{2^n - 1}{n}$ for arbitrary n , $n \geq 3$, $\epsilon_n \rightarrow 0$ when $n \rightarrow \infty$.

All the basic results were obtained in the study of another digital characteristic of the functions - the eccentricity $Y(f)$ - rather than directly of $R(f)$. The transition to estimations for R is made only toward the end of the paper. The author makes the point that whatever synthesis algorithm is obtained as "sufficiently simple", it is not excluded that it may be found to be not only not the minimal, but even the maximal d.n.f. of the function f . Thus, comparison of the complexity of these d.n.f. bears on a wide class of synthesis algorithms of "sufficiently simple" d.n.f. The work is divided into 10 sections: 1 - introduction;

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ACCESSION NR: AT4016486

2 - general part; 3 - theorem concerning the "superposition" of blind d.n.f.; 4 - estimate of $Y(n)$; 5 - theorem of splitting; 6 - relation between eccentricity and uniformity of functions (first step); 7 - relation between eccentricity and uniformity of functions (second step); 8 - construction of reference sequence; 9 - estimates for R ; 10 - some other applications of the theorem of splittings. Each section is provided with a brief introductory statement. A diagram illustrating the interrelation of the individual sections is also provided in the section entitled "Introduction". Orig. art. has: 3 tables, numerous equations and 5 figures.

ASSOCIATION: none

SUBMITTED: 31Jul62

ENCL: 00

SUB CODE: IE, MA

NO REF SOV: 015

OTHER: 008

Card 4/4

VASIL'YEV, Yu.L. (Novosibirsk)

Comparison of the complexity of dead-end and minimal disjunctive
normal forms. Probl. kib. no.10:5-6 '63.

(MIRA 18:4)

VASIL'YEV, Yu.L. (Nover 1910)

"Superposition" of abridged disjunctive normal form. From:
kib. no. 12:239-242 '64. (MIRA 1966)

VASIL'YEV, Yu.M.

Stratigraphy of the upper Cretaceous on the Buzachi Peninsula
based on Foraminifera. Izv.vys.ucheb.zav.; geol.i razv. 2
no.4:57-67 Ap '59. (MIRA 12:12)

1. Moskovskiy institut neftekhimicheskoy i gazovoy promy-
shlennosti im. akademika I.M.Gubkina.
(Buzachi Peninsula--Geology, Stratigraphic)
(Foraminifera, Fossil)

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 12,
p 44 (USSR) 15-1957-12-17005

AUTHOR: Vasil'yev, Yu. M.

TITLE: Young Tectonic Movements in Northern Caspian
Region (Molodyye tektonicheskiye dvizheniya v Severnom
Prikaspii)

PERIODICAL: Tr. Mosk. neft. in-ta, 1955, Nr 14, pp 3-11

ABSTRACT: Bibliographical entry

Card 1/1

CHARYGIN, M.M.; VASIL'YEV, Yu.M.

~~Oil prospecting in the Emba region, based on facies and thicknesses~~
of Mesozoic sediments. Geol.nefti 2 no.9:37-44 S '58. (MIRA 11:10)

1. Moskovskiy ordena Trudovogo Krasnogo Znameni neftyanoy institut
im. akademika I.M. Gubkina.

(Kazakhstan--Petroleum geology)

VASIL'YEV, Yu.M.; KAZAKOV, M.P.; CHARYGIN, M.M.

Gas and oil potentials of the northern Caspian Sea region.
Izv.vys.ucheb.zav.; neft' i gaz. no.7:3-9 '58'. (MIRA 11:11)

1. Moskovskiy neftyanoy institut im. akad. I.M.Gubkina.
(Caspian Sea region--Petroleum geology)
(Caspian Sea region--Gas, Natural--Geology)

3(0)

AUTHORS: Charygin, M. M., Vasil'yev, Yu. M. SOV/26-122-5-42/56

TITLE: New Data Concerning the Stratigraphy of the Paleogene of the Buzachi Peninsula (Novyye dannyye po stratigrafii paleogena poluostrova Buzachi)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol 122, Nr 5, pp 900 - 901 (USSR)

ABSTRACT: Study of cores from numerous wells, which have been drilled in Buzachi during the last five years, have shown the presence of microfossils from the Paleocene, Eocene, and Oligocene. (The identifications of foraminifers were made by I.A. Vertel'sa-Uspenskaya in the Aerological Laboratory of Aerological Expedition Nr 10, All Union Aerological Trust). The Paleocene sediments grade into the overlying Lower Eocene sediments (thickness of 5-16 m) without a sharp lithologic break. Underlying the Eocene sediments is a 10-12 m thick package of strata consisting of gray-green and red-brown, sandy marl, which is characterized by a special microfossils containing several foraminifera typical of the

Card 1/4

New Data Concerning the Stratigraphy of the Paleogene
of the Buzachi Peninsula.

SOV/20-122-5-42/56

Paleocene (Ref 2). Overlying the Lower Eocene is a Middle Eocene package of light gray and white marl containing grains of crystalline and flakey pyrite. Strata of the Globorotalia crassiformis zone of the northern Caucasus, as well as the "white" Mangyshlak suite (Ref 1), can be correlated on the basis of the foraminifera fauna found here. The Middle Eocene is 15-32 m thick. Sediments of the Lower and Middle Eocene are found in both the southern and eastern parts of the Buzachi peninsula. The most characteristic Paleogene horizon in Buzachi is a package of coffee-brown clay and marl beds containing numerous fish remains. These beds are called the Rybnaya (fish) suite and serve as a good marker horizon. The age of this horizon has been determined as Upper Eocene (Refs 1 and 2), and its thickness varies between 30 and 55 m. At the top of the Upper Eocene section is a group of light gray and yellow-white, well cemented marls, which contain grains of pyrite and bituminous material, and which are also believed

Card 2/4

New Data Concerning the Stratigraphy of the Paleogene
of the Buzachi Peninsula

SOV/26-122-5-42/56

to be Upper Eocene. The thickness of these beds varies between 10 and 35 m. The stratigraphic subdivision of the Paleogene of the Buzachi peninsula makes geological mapping possible and helps to locate the large anticlinal structures. This has furthered the search for oil and gas in the region. There are 2 Soviet references.

ASSOCIATION: Nuchevskiy Neftegaz Institut im. I. M. Gubkina
(Moscow Petroleum Institute imeni I. M. Gubkin)

PRESENTED: April 26, 1958, by S.I. Mirman, Academician

SUBMITTED: April 21, 1958

Card 3/4

VASILYEV, YU.M.

11(4)

by

PHASE I BOOK EXPLOITATION

SOV/1492

Moscow. Neftyanoy institut

Voprosy geologii i dobychi nefti (Problems in Geology and Oil Production)
Moscow, Gostoptekhizdat, 1958. 282 p. (Series: Ito: Trudy, vyp. 22)
1,300 copies printed.

Exec. Ed.: G.F. Morgunova; Tech. Ed.: A.S. Polosina; Editorial Board: K.F. Zhigach, Professor (Resp. Ed.); I.M. Murav'yev, Professor; A.A. Tikhomirov, Candidate of Economical Sciences; V.I. Yegorov, Candidate of Economical Sciences; M.M. Charygin, Professor; F.F. Dunayev, Professor; N.I. Chernozhukov, Professor; Ye.M. Kuzmak, Professor; I.A. Charnyy, Professor; G.M. Panchenkov, Professor; V.N. Dakhnov, Professor; N.S. Nametkin, Doctor of Chemical Sciences; N.A. Almazov, Docent; V.N. Vinogradov, Candidate of Technical Sciences; V.I. Biryukov, Candidate of Technical Sciences; E.I. Tagiyev, Professor; V.M. Gurevich.

PURPOSE: This book is intended for technical personnel in the oil and gas industries, as well as for instructors and advanced students in petroleum

Card 1/5

Problems in Geology and Oil Products

SOV/1492

engineering institutes.

COVERAGE: This collection of articles, written by members of the teaching staff of the Moscow Petroleum Institute imeni I.M. Gubkina, is devoted to a discussion of the geology and production of petroleum, particularly as it applies to the Stalingradskoye Povolzh'ye, the Predkavkaz'ye, and the Southeastern part of the Russian Platform. The articles include reports on studies in hydrogeology and geophysics, a discussion of problems in directional drilling, and a review of the methodology of oil displacement (dislodging) in porous media through water drive. The articles are accompanied by diagrams, graphs, tables, and bibliographic references.

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Florenskiy, V.P. (Deceased), T.A. Lapinskaya, and V.S. Knyazev. Petrography of the Stalingradskoe Povolzh'ye Crystalline Basement 3

Kazakov, M.P., Yu.M. Vasil'yev, and V.L. Shirokov. Development of the Principles of Tectonics of Predkavkaz'ye and the Southern Periphery of the Russian Platform 29

Bykov, R.I. Certain Characteristics in the Development of the Southeastern
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Problems in Geology and Oil Products

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Problems in Geology and Oil Products

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Card 4/5

Problems in Geology and Oil Products

SOV/1492

- Gimatudinov, Sh.K., and M.M. Kusakov. Effect of the Velocity of Displacement of Oil by Water in Natural Cores on Oil Recovery 207
- Govorova, G.L., and M.A. Guseyn-Zade. Simplified Formulas for Computing the Well Output 217
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- Kuo Shang-ping. Computing the Output of a Well With a Fracture Close to the Productive Horizon 245
- Belorussov, V.O. Directional Well-drilling by Well Bottom Variable Three-Dimensional Coordinates 254
- Simonov, V. V. A Study of the Flow of Solutions Through Flushing Channels of Rock Bits 270

AVAILABLE: Library of Congress

Card 5/5

MM/fal
5-8-59

30V/11-50-5-5/14

3(5)

AUTHOR: Vasil'yev, Yu.M.

TITLE: The Quaternary Deposits of the Northern Part of the Caspian Region (Chetvertichnyye otlozheniya Severnogo Prikaspiya)

PERIODICAL: Izvestiya Akademii nauk SSSR, Seriya geologicheskaya, 1959, Nr 5, pp 60-73 (USSR)

ABSTRACT:

The author divides the Quaternary formations of the region north of the Caspian Sea and between the Volga and Ural rivers into three stages: the Baku, Khazar and Khvalynsk stages, each again divided into sub-stages. The Baku deposits are of maritime and continental origin. At the time of development, the southern part of the region was covered with sea and the Singil' beds of clay were formed there, whereas in the northern part, subaerial Astrakhan' beds of yellow and brown clay were formed. There are 2 sub-stages. At the beginning of the Khazar stage, increased erosion of the region occurred. Sea trans-

Card 1/3

BOV/11-50-5-5/14

The Quaternary Deposits of the Northern Part of the Caspian Region.

gression again occurred in the southern part, and in the northern part argillaceous beds were formed on the elevated parts. Shortly after, almost the whole region was covered by a meadow-marsly type soil. At the end of the Khazar stage, subaerial loess-argillaceous layers were formed, replaced in the southern part by lagoon-type sedimentations. There are 2 substages. There are three substages in the Khvalynsk stage. In the lower substage - maritime sedimentation beds, covered in the middle substage by formations of muddy salinated beds. In the upper substage, the sea definitely retreated and further sedimentation occurred only in river valleys, lagoons and lakes. Traces of cricturbation were found in the Lower and Upper Khazar beds. In general, all stages are about 15-18 m thick. The following geologists

Card 2/3

SCV/11-59-5-5/14

The Quaternary Deposits of the Northern Part of the Caspian Region.

are mentioned by the author: P.A. Pravoslavlev, M.M. Zhukov, V.I. Kovda, I.P. Gerasimov, P.V. Fedorov, Ye.V. Shantser, V.I. Gromov, N.I. Nikolayev, G.F. Mirchinko, P.A. Nikitin, P.I. Dorofeyev, V.P. Grishuk, A.I. Moskvitin, M.V. Karandeyeva, Yu.Z. Brotskiy, and M.P. Britsyna. There are 1 map, 1 diagram and 23 Soviet references.

ASSOCIATION: Geologicheskii institut AN SSSR (The Geologic Institute of the AS USSR- Moscow)

SUBMITTED: August 20 1958

Card 3/3

AUTHOR: Vasil'yev, Yu.M. SOV/11-58-12-11/15

TITLE: On the Appearance of Traces of Permafrost Processes in the Quaternary Deposits in the Northern Part of the Caspian Sea Region (O sledakh proyavleniya merzlotnykh protsessov v chetvertichnykh otlozheniyakh Severnogo Prikaspiya)

PERIODICAL: Izvestiya Akademii nauk SSSR, Seriya geologicheskaya, 1958, Nr 12, pp 110-111 (USSR)

ABSTRACT: The author describes the traces of cryoturbation in the Middle- and Upper-Quaternary layers near Chërnyy Yar village on the banks of the Volga river, in the northern part of the Caspian Sea region. Repeated findings of wedge-like cryolites embedded in successive layers of that period show that there were four interglacial stages in the Quaternary period. Similar findings were made in other parts of the Russian Plateau. There are 2 Soviet references.

ASSOCIATION: Geologicheskii institut AN SSSR, Moskva (The Geological Institute of the AS USSR, Moscow)

SUBMITTED: April 22, 1957

Card 1/1

Author: Vasiliev, M. G., Zhelezov, I. I., Petrov, Y. I.

Title: "The Cheker Massif in the Northern Caspian Region (the Kirovskaya steppe, mainly the Kirovskiy district)"

Source: Geology, Kazan, No. 6, 1967, pp. 1-11. Nr 6, pp. 1067-1067 (1967)

Summary: Among the various massifs of the Caspian depression only the massif mentioned in the title has remained uninvestigated. In 1912 it was gravimetrically discovered. Only since 1952 systematic investigations of the Cheker massif have been carried out. From information for the description of its geological structure were gained on large scale. The mentioned massif (100 km north-east of the city of Ufa, U.S.S.R.). In the surface relief the mountain of Ufa, and the Cheker sea corresponds to it. This place was the present gravimetric minimum of the entire Caspian region (Kirovskiy) was found. First of all the extraordinary size of the massif is recognized: a surface of more than 100 km². Thus this massif is 80 - 100 times bigger than a normal sea dome as it is typical for this region. The core of the massif consists of a thick

[illegible]

The Sheikhan oil field in the Northern Caspian region

Figure.

LOCATION: Moskovskiy neftnyy institut im. S. M. Gubkina (Moscow In-
stitute of **Petroleum** named S. M. Gubkin)

PUBLISHED: April 26, 1958, by S. I. Mironov, Member, Academy of Sciences,
USSR

SUBMITTED: April 21, 1958

Card 3/3

VASIL'YEV, Yu. K., Cand Tech Sci -- (diss) "Roller bearings from wood of contour pressing (DP-K) in cast and in lift-transport equipment." Voronezh, 1960. 15 pp; (Ministry of Higher and Secondary Specialist Education RSFSR, Voronezh Forestry Engineering Inst); 150 copies; price not given; (KL, 24-60, 132)

16(1)

AUTHOR: Vasil'yev, Yu.L.

SOV/20-127-2-2/70

TITLE: Minimum Contact Circuits for Boole's Functions of Four Variables

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 127, Nr 2, pp 242-245 (USSR)

ABSTRACT: The present paper is a further development of the author's certificate, on the most essential results of which in 1957 S.V. Yablonskiy has reported on the All-Union Congress on All-Relay Systems. The author starts from a catalogue of circuits for functions of four variables (synopsis of the catalogues of [Ref 7] and [Ref 8]). Then it is proved that all circuits of the catalogue are minimal. The idea of the proof is as follows: for the number of contacts in all possible realizations of the given function by circuits, a good estimation from below is determined so that this estimation is reached by at least one circuit. Five theorems are given altogether. The author mentions A.A.Markov, and G.N.Povarov. There are 2 tables, 2 figures, and 11 references, 6 of which are Soviet, 3 American, and 2 French.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova (Moscow State University imeni M.V.Lomonosov)

PRESENTED: April 2, 1959, by M.V.Keldysh, Academician

SUBMITTED: March 31, 1959

Card 1/1

VASIL'YEV, Yu.M., inzhener.

Some problems in the route planning for the Moscow city transportation. Gor.khoz.Mosk.30 no.12:16-18 D '56. (MIRA 10:2)
(Moscow--Traffic engineering)

VASIL'YEV, Yu.M., inzh.; OKHRIMENKO, R.K.

New rollers on pneumatic tires. Avt.dor. 23 no.7:10-11
Jl '60. (MIRA 13:7)
(Rollers (Earthwork))

VASIL'YEV, Yu.M., inzh.

Mechanization of the surface treatment. Avt.dor. 23 no.3:22
Mr '60. (MIRA 13:6)

(Baltic States--Road machinery)

VASIL'YEV, Yu. M.

Ability of various normal tissues to stimulate the growth of
tumor cells. Vop. onk. 8 no.4:61-67 '62. (MIRA 15:4)

1. Iz otdela kantserogennykh agentov (zav. - chl.-korr. AMN SSSR,
prof. L. M. Shabad) Instituta eksperimental'noy i klinicheskoy
onkologii AMN SSSR (dir. - deystv. chl. AMN SSSR, prof. N. N.
Blokhin). Adres avtora: Moskva, I-110, 3-ya Meshchanskaya, d.
61/2, korp. 2, Institut eksperimental'noy i klinicheskoy onko-
logii.

(CANCER)

CHUMAKOVA, M.Ya.; VASIL'YEV, Yu.M.; SAVINOV, A.P.; AGOL, V.I.;
TSYPKIN, L.B.

Strain of malignant cells obtained through the prolonged cultivation in vitro of normal kidney tissue from mice of the A/SN line. Vop.onk. 8 no.8:51-57 '62. (MIRA 15:9)

1. Iz Instituta po izucheniyu poliomeleta i virusnykh entsefalitov (dir. - deystv. chl. AMN SSSR, prof. M.P. Chumakov) i Instituta eksperimental'noy i klinicheskoy onkologii (dir. - deystv. chl. AMN SSSR, prof. N.N. Blokhin) Akademii meditsinskikh nauk SSSR.
(CANCER) (TISSUE CULTURE) (KIDNEYS)

VASIL'YEV, Yu.M., kand.tekhn.nauk; KHARKHUTA, N.Ya., kand.tekhn.nauk

Rollers on pneumatic tires. Stroi. i dor. mash. 7
no.8:11-12 Ag '62. (MIRA 15:9)
(Rollers (Earthwork))

VASIL'YEV, Yu.M.; GEL'SHTEYN, V.I.

Receprocal relations of precancerous changes and reactive proliferation. Vest.AMN SSSR 17 no.6:7-16 '62. (MIRA 15:8)

1. Institut eksperimental'noy i klinicheskoy onkologii AMN SSSR.
(CARCINOGENESIS)

VASIL'YEV, Yu. M.; KAZAKOV, M. P.; CHARYGIN, M. M.

Prospects of extra-deep drilling in the Caspian Lowland. Razved.
i okh. nedr 28 no.5:4-6 My '62. (MIRA 15:10)

1. Moskovskiy institut neftekhimicheskoy i gazovoy promyshlennosti
im. akademika Gubkina.

(Caspian Lowland--Boring)

PROSHLYAKOV, B.K.; VASIL'YEV, Yu.M.

Reef formations in the southern Emba region. Trud. MINKHIGP
no.38:144-148 '62. (MIRA 15:9)
(Emba region--Reefs)

ARABADZHI, M.S.; VASIL'YEV, Yu.M.; MIL'NICHUK, V.S.

Seismic errors in the central and western regions of the
Caspian Lowland. Izv. vys. ucheb. zav.; naft' i gaz 5
no.11:3-7 '62. (MIRA 17:6)

1. Moskovskiy institut naftokhimicheskoy i gazovoy promyshlennosti
imeni akademika I.M. Gurkina.

CHARYGIN, M. M.; VASIL'YEV, Yu. M.; KALAMKAROV, L. V.

"Some peculiarities of oil and gas distribution in salt domes of the world."

report submitted for 22nd Sess, Intl Geological Cong, New Delhi, 14-22 Dec 1964.

VASIL'YEV, Yu. M.

Geology - Caspian Depression. Folds (Geology).

On the existence of the buried Hercynian folding in the northern part of the Caspian Depression., Dokl. AN SSSR, 81, No. 5, 1951.

Saratovskiy Gosudarstvennyy Universitet im. N. G. Chernyshevskogo.

SO: Monthly List of Russian Accessions, Library of Congress, May ²195~~3~~, Uncl.
Red. 5 July 1951.

VASIL'YEV, Yu.M.

Young tectonic movements in the northern Caspian Sea region. Trudy
(MIRA 8:11)
MNI no.14:3-11 '55.
(Caspian Depression--Geology)

VASIL'YEV, Yu.M.

Tectonic structure of the Buzachi peninsula. Dokl. AN (MLRA 10:2)
SSSR 110 no.6:1053-1056 0 '56.

1. Moskovskiy neftyanoy institut imeni I.M. Gubkina.
Predstavleno akademikom S.I. Mironovym.
(Buzachi Peninsula--Geology, Structural)

VAS. U'YEV, Yu. M.
VASIL'YEV, Yu. M.

Using aerophotographic methods for geological surveying in the Ural-
Mba oil-bearing area. Trudy MNI no.19:113-173 '57. (MIRA 11:1)
(Caspian Depression--Geology)
(Photography, Aerial)

VASIL'YEV, Yu.M.

Characteristics of the Kungur facies in the Caspian Sea region as compared to certain features of the southwestern parts of the Russian Platform. Dokl.AN SSSR 112 no.1:109-112 Ja '57. (MLRA 10:2)

1. Moskovskiy neftyanoy institut imeni I.M.Gubkina. Predstavleno akademikom S.I.Mironovym.
(Caspian Sea region--Geology. Stratigraphic)

VASIL'YEV, Yu. M.

20-5-32/54

AUTHORS: Vasil'yev, Yu. M. and
Proshlyakov, B. K.

TITLE: The Petrographic Peculiarities of the Carboniferous
of the South Emba Upheaval (Petrograficheskiye
osobennosti karbona Yuzhno-Embenskogo podnyatiya).

PERIODICAL: Doklady Akademii Nauk SSSR, 1957, Vol. 115, Nr 5,
pp. 968-970 (USSR)

ABSTRACT: Recently the question of the character and the origin
of the carboniferous deposits which were discovered
by bore-holes in the said elevation, were discussed.
Some experts were of opinion that these sediments re-
present typical formations of plateaus which, according
to their composition, are very much related to those
belonging to the "syneklisis" of Moscow. The petro-
graphical investigations of the rocks by the authors
supplied additional material which permits a critical
consideration of the above conclusion. The super-
carboniferous lime-stones are conspicuous even in case
of a superficial macroscopic observation by their
extremely intensive condition of recrystallization and

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The Petrographic Peculiarities of the Carboniferous of the 20-5-32/54
South Emba Upheaval

by their maximum solidification. They are transparent at fine fissures and may be classified among the marble-like lime-stones. The loams occurring in this area are similarly converted, so that they almost entirely lost their aptitude for plastic deformation. The material from the microscopical studies, in comparison to the similar formations of the basin of Moscow, is still of greater interest. There are no pores determinable in the Emba lime-stones, not even in case of 160 X. Substantial differences are also noticed in the structure of both species of lime-stone: The Emba lime stones show a mosaic structure and may be considered as middle crystalline, according to their grainsize (0,08-0,25 mm) Fauna residues are found in the lime stones of both areas. A great number of coral skeletons, "formaniferous" shells, splinters of "Echinoderm" shields, "Ostrakode" shells, etc exist in the "Podol" lines of Moscow. They are well conserved and easily determinable.

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The Petrographic Peculiarities of the Carboniferous of the South Emba Upheaval 20-5-32/54

Incomparably smaller quantities of these residues are found in the Emba lime. Due to an intensive recrystallization their structure has been largely distorted and deformed, which renders the determination of their belonging to a specific species considerably difficult, if it does not prevent it entirely. Maybe, there once has been a greater number of these residues which have, however, become unrecognizable by recrystallization. It hence follows that the limes of Moscow have not suffered any substantial conversions. On the other hand, there are, moreover, still traces of an arrangement of the initially accidental orientation of particles, as well as of solidification and contraction shrinkage. This proves a strange metamorphization (even if it has not been fully developed) of the carboniferous sediments of the South Emba elevation. In this context, the increased pressure may be considered a leading factor. Presumably, the following paleotectonical conditions of the two areas have also been substantially different from each other. Those of Moscow are typical plateau deposits.

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The Petrographic Peculiarities of the Carboniferous of the
South Emba Upheaval

20-5-32/54

The Emba formations of the same age show deviating and divergent features. The listed petrographical peculiarities - besides the occurrence of terrigenous layers of several hundred meters of thickness - do not permit the Emba limes to be considered as typical plateau formations. These formations - on the contrary - were much more closely related to the formation of folds and the zone of "Herzynides" embedded nearly than with the processes which occurred at that time in the interior of the Russian plateau. Therefore it would be more correct to consider the South Emba elevation not as a typical plateau formation, but as a peculiar tectonic element which occurs within the range of boundary flexion. A practically important conclusion may be drawn from this: As far as the carboniferous masses occur in this area in solidified and recrystallized condition, their porosity and "collector" properties can scarcely be favorable for the discovery of exploitable petroleum deposits. Maybe there is an analogy with the area of the Aktyubinsk-Ural where all efforts to find exploitable petroleum have

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The Petrographic Peculiarities of the Carboniferous of the South Emba Upheaval 20-5-32/54

failed up to the present. Perhaps it would be more advisable to consider the "terrigenous carboniferous masses more carefully. There are 3 figures (5 micro-photographs) and 7 Slavic references.

ASSOCIATION: Moscow Institute for Petroleum Research imeni I. M. Gubkin (Moskovskiy neftyanoy institut im. I. M. Gubkina).

PRESENTED: By D. I. Shcherbakov, Academician, February 28, 1957

SUBMITTED: February 27, 1957

AVAILABLE: Library of Congress

CARD 5/5

6.11.1958 11:51 Mikhailovich
KAZAKOV, Mikhail Pavlovich; CHARYGIN, Mikhail Mikhailovich; BYKOV, Risk
Ivanovich; VASIL'EV, Yuriy Mikhailovich; ZNAMENSKIY, Vladimir
Vyacheslavovich; SMYUL'-MULYUKOV, Rustem Bedirovich; POLOSINA,
A.S., tekhn. red.

[Tectonics and history of the development of the Caspian Depression
and adjacent regions in connection with questions of the presence
of gas and petroleum] Tektonicheskoe stroenie i istoria razvitiia
Prikaspiiskoi vpadiny i smezhnykh oblastei v sviazi s voprosami
neftegazonosnosti. Pod red. M.P. Kazakova i M.M. Charygina. Moskva,
Gos. nauchno-tekhn. izd-vo nef. i gorno-toplivnoi lit-ry, 1958.
402 p. (MIRA 11:9)

(Caspian Depression—Geology, Structural)

VASIL'YEV, Yu.M.

~~Oil-~~ and gas-bearing prospects on the Buzachi Peninsula in the
light of new data. Izv. vys. ucheb. zav.; geol. i razv. no.2:
94-98 P '58. (MIRA 11:6)

1. Moskovskiy neftyanoy institut im. akademika I.M. Gubkina.
(Buzachi Peninsula--Petroleum geology)
(Buzachi Peninsula--Gas, Natural--Geology)

KAZAKOV, M.P.; VASIL'YEV, Yu.M.; SHIROKOV, V.Ya.

Development of concepts on the tectonics of Ciscaucasia and the southern boundary of the Russian Platform. Trudy MNI no.22:29-62 '58.

(MIRA 12:4)

(Russian Platform--Geology, Structural)
(Caucasus, Northern--Geology, Structural)

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Traces of permafrost phenomena in Quaternary sediments of the
northern Caspian Sea region. Izv. AN SSSR. Ser. geol. 23 no.12:
110-111 D '58. (MIRA 12:3)

1.Geologicheskii institut AN SSSR, Moskva.
(Caspian Sea region--Geology, Stratigraphic)
(Frozen ground)

AUTHOR: Vasil'yev, Yu. M.

20-119-4-36/60

TITLE: Inherited Folding Between South Ural and Mangyshlak
(Unasledovannaya skladchatost' mezhdru Yuznym Uralom
i Mangyshlakom)

PERIODICAL: Doklady Akademii Nauk SSSR, 1958, Vol. 119, Nr 4,
pp. 759-762 (USSR)

ABSTRACT: There is scarcely a problem in geological literature
which to such an extent has attracted the attention
of geologists as that of the south-east framing of the
Russian Plateau. The discussion whether the fold system
of the Ural is continued underground, where this
continuation lies, and with which known formations
it is conjugated has now lasted for 40 years.
The numerous published hypotheses could, however,
not solve this problem in consequence of the lacking
facts. The last century furnished such material.
Hence a structural scheme according to the roof of
Upper Cretaceous could be made (figure 1). This scheme might
be used to investigate several more

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important items of the problem. The newest investigations showed that 1) The Ural fold system ceases neither at the southern end of Mugodzhar, nor in the Chushka-Kul'-zone. It turns to south west, sinks gradually, and can be observed up to the Aul (village) of Ak-Tumsuk and then up to the northern boundaries of Ust'-Urt. Moreover, the system is indicated even in the region of the northern Ust'-Urt. To this continuation correspond the dislocations of the Chushka-Kul'-zone as well as the anticlinals: Aktumsuk and Kurgan, which correspond to this continuation in the sedimentary cover. 2) Two systems of inherited structures occur in the region of the peninsula of Buzachi. They do not differ from the dislocations of the Chushka-Kul'-zone and other inherited dislocations of the Ural-Siberian epihercynian plateau. They reflect obviously the structural main elements of the buried Hercynian fundament which are analogous to those expressed in the Chushka-Kul'-zone of elevations. 3) A new fold system is found at the east coast of Mervyy Kultuk which is analogous to the above mentioned. These folds are inherited, too, and the last mentioned reflection of

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Inherited Folding Between South Ural and Mangyshlak

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a folded fundament, apparently also Hercynian, takes also place here. Thus an uninterrupted fold system lies between the south Ural and the Buzachi peninsula (figure 2). The folds are completely analogous in all intermediate zones. Hence can be concluded that these zones are parts of a now buried system of Hercynian folding which, in the shape of a smooth curve, frames the Russian Plateau from the southeast. Between this system and the margin of the plateau lies a thrust-out downwarping in the region of which no continuous, but an interrupted folding is distributed. It is not inherited, or to a very small extent so. The mesocenozoic dislocations in the district of the south Emba elevation are of this kind. (figure 2). There are 2 figures, none of which are Soviet.

ASSOCIATION: Moskovskiy neftyanoy institut im. I. M. Gubkina
(Moscow Petroleum Institute imeni I. M. Gubkin)

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Inherited Folding Between South Ural and Mangyshlak 20-119-4-36/60

PRESENTED: November 12, 1957, by D. I. Shcherbakov, Member, Academy
of Sciences, USSR

SUBMITTED: November 10, 1957

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VASIL'YEV, Yu.M.; KAZAKOV, M.P.; CHARYGIN, M.M.

[Tectonics, oil and gas potentials, and basic trends in geo-
physical investigations of the northern Caspian Sea region]
Tektonika, perspektivy gazoneftenosnosti i osnovnye napravleniia
geologo-geofizicheskikh issledovaniĭ v Severnom Prikaspii.
Moskva, Vses.nauchno-issl.in-t prirodnkh gazov, 1959. 49 p.
(MIRA 13:9)

(Caspian Sea region--Petroleum geology)
(Caspian Sea region--Gas, Natural--Geology)

VASIL'YEV, Yu.M.

Comparing Quaternary sedimentation in the Caspian Sea region with
the glaciation of the East European Plain. Biul.Kom.chetv.per.
no.23:91-96 '59. (MIRA 13:4)
(East European Plain--Glacial epoch)

3 (5)

AUTHOR:

Vasil'yev, Yu. M.

SOV/20-126-5-38/69

TITLE:

On the Structure and Age of the Syrt Deposits in the South Transvolga Area (O stroenii i vozraste syrtovykh otlozheniy yuzhnogo Zavolzh'ya)

PERIODICAL:

Doklady Akademii nauk SSSR, 1959, Vol 126, Nr 5, pp 1051 - 1054 (USSR)

ABSTRACT:

In 1951-56, the author had an opportunity of investigating the Syrt deposits (mainly on the basis of material from borings) in the south of the Syrt Plain in the area between the rivers Volga and Ural (south of the Saratov-Ural'sk railroad). He was able to ascertain that the Syrt deposits are little different, by character and age, from analogous masses of the cover formations in the central and southern areas of the European part of the USSR. The opinions of different investigators on their structure are rather contradictory (Refs 3,5,8,10-12). The data obtained by the author complete the scheme suggested by F. P. Savarenskiy (Refs 11,12). The upper part of the mass consists of 2 horizons I and II with an intermediate layer of buried soil (P₁). The central part of the Syrt mass (horizon III) is mainly brown-colored. The underlying horizon (IV) has, similar

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On the Structure and Age of the Syrt Deposits in the South Transvolga Area SOV/20-126-5-38/69

to I and II, fossil soil (P_3). Often there is still horizon (V), consisting of sandy clay, lying under (IV). As to the age, the author joins those investigators who classify the Syrt mass to the Quaternary period (Refs 2,4,8,9,11,13). By comparing the horizons of the Syrt deposits with the Kaspiyskiye, it can be observed that the lower horizon of the former (IV) almost lies on the same level with the Astrakhanskiye (Bakinskiye) continental layers, and is made up of the same clays etc. (in agreement with references 2,4,11,14,15). The middle horizon (III) is put into correlation by the author with the lower Khazarakiye layers of the "Priekaspiy" (area near Caspian Sea). Horizon (II) is compared with the Atel'skiye layers, while the top horizon (I) can be easily compared with the lower Khvalynskiy horizon of the Priekaspiy. If the above data are correct, the question may be raised whether the principal mass of the Syrt deposits has formed in the aeolian way. There is no reason why the Syrt mass should be considered an old peculiar geological body unique in its kind. It stands in one line with the other cover formations of the Russkaya ravnina (Russian Plain).

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On the Structure and Age of the Syrt Deposits in the SOV/20-126-5-38/69
South Transvolga Area

There are 16 Soviet references.

ASSOCIATION: Geologicheskii institut Akademii nauk SSSR (Geological Institute of the Academy of Sciences, USSR)

PRESENTED: February 9, 1959, by A. L. Yanshin, Academician

SUBMITTED: February 9, 1959

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BOGACHEVA, M.I.; VASIL'YEV, Yu.M.; PROSHLYAKOV, B.K.; CHARYGIN, M.M.;
SHLEYFER, A.G.

Unique Triassic cross section in the Aralsorsk extra-deep
borehole (Caspian Lowland). Dokl. AN SSSR 165 no.3:629-632
N '65. (MIRA 18:11)

1. Moskovskiy institut neftekhimicheskoy i gazovoy promyshlen-
nosti im. I.M. Gubkina. Submitted May 27, 1965.

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Using mathematical statistics in petroleum geology. Izv. vys.
ucheb. zav.; neft' i gaz 8 no.4:3-8 '65. (MIRA 18:5)

1. Moskovskiy institut neftekhimicheskoy i gazovoy promyshlennosti
im. akademika I.M.Gubkina.